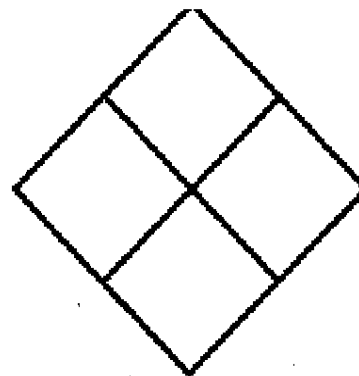




Ridge Tool Company
400 Clark Street
Elyria, Ohio 44036-2023, U.S.A.



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT INFORMATION

PRODUCT NAME: NICKEL CADMIUM BATTERY	EMERGENCY TELEPHONE NUMBER: (312) 595-5600
MANUFACTURER: SANYO ENERGY CORP.	TELEPHONE NUMBER FOR INFORMATION: 1-800-519-3456
DOT PROPER SHIPPING NAME: NOT A REGULATED MATERIAL	DATE PREPARED: FEBRUARY 27, 1998

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	%
Cadmium Hydroxide	N/A	None Established	None Established	11-26
Nickel Hydroxide	N/A	None Established	None Established	5-12
Nickel Powder	N/A	None Established	None Established	8-17
Potassium Hydroxide	N/A	None Established	None Established	Less than 3
Lithium Hydroxide	N/A	None Established	None Established	Less than 3

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	N/A	Specific Gravity (H ₂ O = 1):	N/A
Vapor Pressure (mm Hg.)	N/A	Solubility in Water:	No Violent Reaction
Vapor Density (Air = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	

APPEARANCE AND ODOR:

Sealed cylindrical batteries.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: (Method Used) N/A	Flammable Limits:	LEL:	UEL:
Extinguishing Media: N/A			
Special Fire Fighting Procedures: N/A			
Unusual Fire and Explosion Hazards: N/A			

SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid:
	Stable	X	
Incompatibility: (Materials to Avoid)			
Hazardous Decomposition or Byproducts:			
Hazardous Polymerization	May Occur		Conditions to Avoid:
	Will not Occur	X	None

SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	X	X	X

Health Hazards: (Acute and Chronic)

Skin/Eyes: Contents from an opened battery may cause severe irritation and chemical burns. *Swallowing:* Electrolyte may cause serious localized burns. Cadmium compounds may cause choking, nausea, vomiting, unconsciousness, and possible liver and kidney injury.

Carcinogenicity:

Nickel powder and cadmium compounds are known to cause cancer to humans.

Signs and Symptoms of Exposure:

Caustic irritation or burns.

Medical Conditions Generally Aggravated by Exposure:

Overexposure is unlikely to aggravate existing medical conditions.

Emergency and First Aid Procedures:

Swallowing: Do not induce vomiting. Seek medical attention.

Skin: If contents from an opened battery come in contact with the skin, wash with soap and water.

Eyes: If contents from an opened battery come in contact with eyes, flush with water for at least 15 minutes. Seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE.

Steps to be Taken in Case Material is Released or Spilled:

Handle spilled electrolytes with rubber gloves when wiping up spillage and neutralize electrolytes with diluted acid.

Waste Disposal Method:

Do not incinerate or subject cells to temperatures in excess of 100°. Can vaporize liquid electrolyte and cause cell rupture.

Precautions to be Taken in Handling and Storing:

Store in cool place, but prevent condensation on cell or battery terminals. Storage temperature -30 to 35°C.

Other Precautions:

Contact Sanyo Electric Corp. regarding any handling questions.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type):

Not required in normal use.

Ventilation:

Not required in normal use.

Protective Gloves:

Not required in normal use.

Eye Protection:

Not required in normal use.

Other Protective Clothing or Equipment:

Not required in normal use.

Work/Hygienic Practices:

N/A.

SECTION IX - REGULATORY INFORMATION

TSCA:

N/A.

Sara Title III:

N/A.

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